

EXECUTIVE SUMMARY

Introduction

The purpose of this study is to enable the Idaho Transportation Department (ITD) to comprehensively tell the story of public transportation in Idaho, including an understanding of:

- Who has accessible public transportation service;
- What type(s) of service they have;
- Who doesn't have accessible service; and
- Why service is inaccessible.

A more thorough understanding of these issues will assist the State of Idaho (State) in knowing what it will take to better serve the public with transportation services.

This executive summary briefly describes the needs assessment process, the existing public transportation services identified in Idaho, the needs assessment results, service strategies developed to meet the needs, costs and benefits of these strategies, and findings and recommendations. The report provides greater detail on the entire process and results, including study definitions, access standards, and the public opinion survey.

Needs Assessment Process

The study undertook a comprehensive assessment process, including identifying existing public transportation services, developing and applying a framework to assess how well these services are meeting the needs of the public, proposing service strategies that could fill in the gaps, quantifying costs and benefits of those strategies, and developing recommendations of what steps the State could take next to provide enhanced, expanded, or new public transportation services. The planning horizon for the study is 20 years (1996-2015), with an emphasis on the 1997-2001 period.

In brief, the "need" was assessed by determining who does and does not have access to existing public transportation services. A model was created as a framework for measuring this access. The model contains four measures (or tiers) of transportation service--existing, minimum, enhanced, and optimal. Each tier provides an increased amount of service (increased by adding either days or hours of service) compared to the previous tier. The amount of service to be provided at each tier was defined by a "standard" or "goal," which reflects either the urban or rural nature of the county in which the service is provided.

Using a model based on a Geographic Information System (GIS), developed by ITD Information Services, in which transportation services are mapped on top of population data. Existing services on a location-specific basis were then compared with these standards. The percent of population with access to each mode of service was then calculated and compared against the

standards in each tier. The percent of population without access to a particular mode was considered to have an “unmet need.” It was assumed that all needs were “met” if 100 percent of the population met a particular standard.

Existing Services In Idaho

A total of 85 organizations currently provide transportation services in Idaho. Some of the providers (e.g., Amtrak, Greyhound, and Northwest Trailways) provide service in multiple regions. The types of service, as listed in Exhibit ES-1, are fixed route, demand response, rideshare (carpool and vanpool), intercity, and (organized) volunteer.

Exhibit ES-1—Summary of Idaho Public Transportation Services and Providers

Type of Service	ITD Region					
	1	2	3	4	5	6
Fixed Route	1	0	2	2	1	2
Demand Response	6	5	25	11	7	9
Rideshare	2	2	4	0	1	1
Intercity	3	4	4	3	3	2
Volunteer	2	3	2	1	1	1
Total Services	14	14	37	17	13	15
Total Providers	11	10	35	14	11	12

Included are services provided by public transportation organizations for social service agencies, such as the Idaho Department of Health and Welfare, Idaho Division of Vocational Rehabilitation. Not included are services provided either directly or through reimbursements to clients by Health and Welfare and Vocational Rehabilitation, by charter services, by care facilities that serve only their own clients, by taxi companies, or for K-12 pupil transportation.

The existing services are as follows:

- **Fixed Route:** Boise/Garden City, Kellogg, Ketchum-Sun Valley, and Pocatello/Chubbuck.
- **Deviated Fixed Route:** Idaho Falls/Ammon, Nampa, Rexburg, and Twin Falls.
- **Demand Response:** provided primarily by transit systems, senior centers, and Indian Tribes, but available to seniors and/or the disabled. In some highly rural areas, where services are minimal, senior centers also serve the general public.



- **Rideshare Services:** provided by transit systems, other nonprofit entities, and major employers. Examples are Hewlett Packard, Idaho National Engineering Laboratory (INEL), Idaho State University, Micron, and St. Luke's Regional Medical Center.
- **Intercity Service:** intra- and inter-regional connections between cities provided by for-profit and non-profit organizations. Amtrak, Greyhound, and some others provide connections to cities in other states.
- **Organized Volunteer Service:** the only form of public transportation available in some areas, playing an important role in transporting the transportation-disadvantaged (e.g., seniors, persons with disabilities, low-income persons) to life sustaining services such as medical treatment.

Needs Assessment Results

The needs assessment was conducted on a region-by-region basis, with emphasis on the county level. This detail can be found in the report. Statewide needs assessment results are summarized in Exhibit ES-2. Results represent the percentage of the population that have access to services, based on the level of service standards developed by this study.

Exhibit ES-2—How Current Services Compare to Level of Service Standards

	Tier 1 Existing	Tier 2 Minimum	Tier 3 Enhanced	Tier 4 Optimal
Fixed Route	64%	47%	0%	0%
Demand Response	58%	49%	21%	2%
Rideshare	49%	49%	49%	49%
Intercity	67%	51%	32%	0%
Volunteer	25%	25%	17%	12%
Coordination	48%	48%	48%	46%

The table is interpreted as follows:

- **Fixed Route:** Sixty-four percent of the population in the state's three urbanized areas and six large urban cities have access to existing fixed route services, which represents an existing level of access (Tier 1). The established standards indicate that the large urban cities of Caldwell, Coeur d'Alene, Lewiston, and Moscow should also have fixed route service but do not. The level of access to fixed route service drops to 47 percent at the minimum standard (Tier 2). None of the existing fixed route services meet the availability requirements (days of week, hours of day) of the enhanced (Tier 3) or optimal (Tier 4) standards.
- **Demand Response:** Fifty-eight percent of the population have access to existing demand response services. This compares to 49 percent at the minimum tier, 21 percent at enhanced, and two percent at optimal. These results indicate that, as the availability requirements increase, the percent of population having access to service that meets the requirements decreases.

- **Rideshare (carpool or vanpool):** Forty-nine percent of the population have access in cities targeted for this service at all four tiers. However, according to established standards, there should also be rideshare services available from large or small urban cities to regional hub(s) in Regions 1, 4, 5, and 6, but there is not.
- **Intercity:** Sixty-seven percent of the population have access at Tier 1 in cities targeted for intercity service, 51 percent at Tiers 2 and 3 (minimum and optimal), and 0 percent at optimal.
- **Organized Volunteer:** Twenty-five percent of the population have access to organized volunteer service at existing and minimum tiers; 17 percent and 12 percent have access at enhanced and optimal tiers, respectively.
- **Coordinated Service:** Forty-eight percent of the population have coordinated service at the existing, minimum, and enhanced levels, and 46 percent, at the optimal level. These results reflect the high level of cooperation among public transportation providers, and between public transportation providers and social service agencies.

Service Strategies

Based on the results of the needs assessment, a series of strategies to enhance or expand existing services or implement new services was developed to meet the “unmet” need. Strategies were developed for each mode (fixed route, demand response, rideshare, intercity, organized volunteer) and for coordination. Proposed services include:

- **Fixed Route:** New fixed route systems are needed in Caldwell, Coeur d’Alene, Lewiston, and Moscow. Existing fixed route systems in Boise, Idaho Falls, Ketchum/Sun Valley, Nampa, and Pocatello need to be enhanced and expanded according to the access and LOS requirements for each access tier. Existing fixed route systems in Kellogg and Rexburg need to be maintained.
- **Demand Response:** Demand response services need to be enhanced according to the access and LOS requirements for each access tier. Depending on the type of county, demand response services also need to be expanded to the unserved population. Approximately 43 percent of the total statewide population have no access to demand response services.
- **Rideshare:** New vanpool services need to be implemented from a number of the small urban cities in each region to regional hubs. Existing vanpool services provided by public transportation systems and major employers need to be maintained and, where necessary, enhanced to meet access and LOS requirements for each access tier. Regional carpool programs need to be implemented in all regions except Region 3. The



regional carpool program in Region 3 needs to be maintained. A regional rideshare/volunteer service coordinator is needed for each region.

- **Intercity:** New intercity services need to be implemented from a number of the small urban cities in each region to regional hubs. Existing intercity services provided by public transportation providers need to be maintained and, where necessary, enhanced to meet access and LOS requirements for each access tier.
- **Volunteer:** Organized volunteer services need to be enhanced and expanded according to the access and LOS requirements for each access tier. Approximately 75 percent of the total statewide population have no access to organized volunteer services. A regional rideshare/volunteer service coordinator is needed for each region.
- **Coordination:** The ITD Division of Public Transportation, the Interagency Working Group, the Public Transportation Advisory Council, and the Regional Public Transportation Advisory Committees need to work with public transportation providers and human service agencies in each region to improve the coordination of public and human service transportation. (Refer to coordination recommendations provided in Section XI of the report for more detail.)

Costs and Benefits

Costs for and benefits of the proposed service strategies were estimated for each of the four levels of service (tiers)--existing, minimum, enhanced, and optimal. Costs were prepared for the 20-year study period (1996 through 2015), with emphasis on the 5-year period 1997 through 2001. The costs include factors for inflation (four percent per year) and projected population growth. These factors have an impact on the total capital and operating costs. Population projections are provided by region for the years 1997 through 2001 and are shown in Exhibit ES-3.

Exhibit ES-3.--Idaho 1997-2001 Population Projections

Region	1997	1998	1999	2000	2001	5-Year Change
1	159,190	163,280	165,325	167,370	170,034	6.8%
2	97,600	98,280	98,620	98,960	99,400	1.8%
3	461,160	474,980	478,890	484,800	492,536	6.8%
4	152,280	153,515	154,133	154,750	155,520	2.1%
5	148,740	149,460	149,820	150,180	150,634	1.3%
6	158,440	161,320	162,760	164,200	166,084	4.8%
Statewide:	1,177,410	1,200,835	1,209,548	1,220,260	1,234,208	4.8%

Regions 1 and 3 are projected to experience the strongest population growth. Region 6 is also projected to experience reasonably strong population growth, 4.8 percent over the 5-year period. The populations in ITD Regions 2, 4, and 5 are not expected to increase significantly from 1997 to 2001.

This study also evaluated both the qualitative and quantitative benefits of public transportation. Some benefits are more readily apparent: job creation, reduced reliance on natural resources, reduced air pollution. Others are more intangible: enhanced quality of life, increased independence, reduced pressure on caregivers, and improved mobility. While a numeric or dollar value may be attached to the first type (quantitative benefit), nonquantifiable (qualitative) benefits are equally important, not only to society as a whole but also to individuals who use the services. An examination of benefits helps decision-makers and community participants alike understand the true value of the public transportation resources.

To quantify the benefits associated with the different "investments" in operating costs, a model containing 12 benefit/cost factors was developed. These factors are vehicle ownership and operation, operation subsidy, user time, accidents, parking, congestion, road facilities, equity and option, new jobs, air pollution, resources, and land use impacts. The cost of operating each mode (fixed route, demand response, rideshare, intercity, volunteer) within each tier and each region



was compared against the cost of automobiles for all the same factors, the result of which was a "benefit" or savings from using public transportation. These savings were then totaled and compared with operating costs to determine a benefit-to-cost ratio. The costs of each mode relate directly to the operating costs developed for each proposed service strategy.

The costs of implementing the proposed service strategies and the related benefits are shown in Exhibit ES-4. Total funding requirements for all modes were also calculated, along with capital and operating components. Benefits reflect a total of all modal savings for each tier and each region, and are based only on the operating component of the cost because the model analysis is based on vehicle-miles.

Exhibit ES-4—1997-2001 Statewide Investment Options and Benefits

Tier 1: Existing					
Mode	1997	1998	1999	2000	2001
Fixed Route	\$5,196,693	\$5,549,316	\$5,542,396	\$7,192,861	\$6,547,759
Demand Response	\$6,582,635	\$4,992,081	\$4,404,988	\$4,672,998	\$4,916,960
Rideshare	\$499,148	\$636,167	\$426,507	\$773,317	\$344,892
Intercity	\$1,276,043	\$1,593,410	\$1,500,246	\$1,299,749	\$1,285,480
Volunteer	\$80,565	\$84,914	\$88,895	\$93,061	\$97,601
Coordination	\$0	\$0	\$0	\$0	\$0
Total Cost	\$13,635,084	\$12,855,888	\$11,963,032	\$14,031,986	\$13,192,692
Capital Cost	\$3,786,682	\$2,428,583	\$1,022,456	\$2,553,755	\$1,119,806
Operating Cost	\$9,848,405	\$10,427,304	\$10,940,579	\$11,478,231	\$12,072,886
Benefit	\$ 54,046,178	\$ 57,247,327	\$ 60,077,649	\$ 63,042,816	\$ 66,326,556
Benefit/Cost	3.94	3.94	3.94	3.95	3.95
Tier 2: Minimum					
Mode	1997	1998	1999	2000	2001
Fixed Route	\$11,577,550	\$16,265,110	\$8,853,325	\$12,137,443	\$10,040,289
Demand Response	\$15,179,794	\$12,389,157	\$11,535,492	\$12,007,461	\$12,678,822
Rideshare	\$3,278,270	\$1,350,570	\$1,365,232	\$1,332,671	\$1,265,215
Intercity	\$10,768,979	\$2,436,245	\$2,995,371	\$2,670,672	\$2,801,548
Volunteer	\$425,802	\$450,233	\$472,088	\$494,974	\$520,184
Coordination	\$360,000	\$374,400	\$389,376	\$404,951	\$421,149
Total Cost	\$41,590,395	\$33,265,715	\$25,610,884	\$29,048,172	\$27,727,207
Capital Cost	\$19,584,532	\$10,138,400	\$1,347,677	\$3,595,210	\$959,112
Operating Cost	\$21,645,864	\$22,752,915	\$23,873,829	\$25,048,014	\$26,346,947
Benefit	\$ 105,319,206	\$ 112,295,378	\$ 117,947,209	\$ 123,870,718	\$ 130,452,882
Benefit/Cost	4.86	4.86	4.86	4.87	4.87
Tier 3: Enhanced					
Mode	1997	1998	1999	2000	2001
Fixed Route	\$16,960,073	\$26,485,445	\$13,357,911	\$17,375,422	\$15,253,965
Demand Response	\$31,024,696	\$23,179,249	\$22,770,553	\$23,882,239	\$25,000,119
Rideshare	\$4,971,045	\$1,690,058	\$1,629,934	\$1,802,960	\$1,510,219
Intercity	\$15,256,154	\$3,756,442	\$4,367,155	\$4,116,855	\$4,608,882
Volunteer	\$652,801	\$690,607	\$724,312	\$759,610	\$798,551
Coordination	\$420,000	\$436,800	\$454,272	\$472,443	\$491,341
Total Cost	\$69,284,769	\$56,238,601	\$43,304,137	\$48,409,529	\$47,663,077
Capital Cost	\$31,337,197	\$16,232,914	\$1,344,167	\$4,377,517	\$1,353,891
Operating Cost	\$37,527,571	\$39,568,889	\$41,517,924	\$43,559,569	\$45,817,846
Benefit	\$ 242,088,586	\$ 256,507,535	\$ 269,495,109	\$ 283,110,185	\$ 298,272,580
Benefit/Cost	6.45	6.48	6.49	6.50	6.51

**Exhibit ES-4—1997-2001 Statewide Investment Options and Benefits
(continued)**

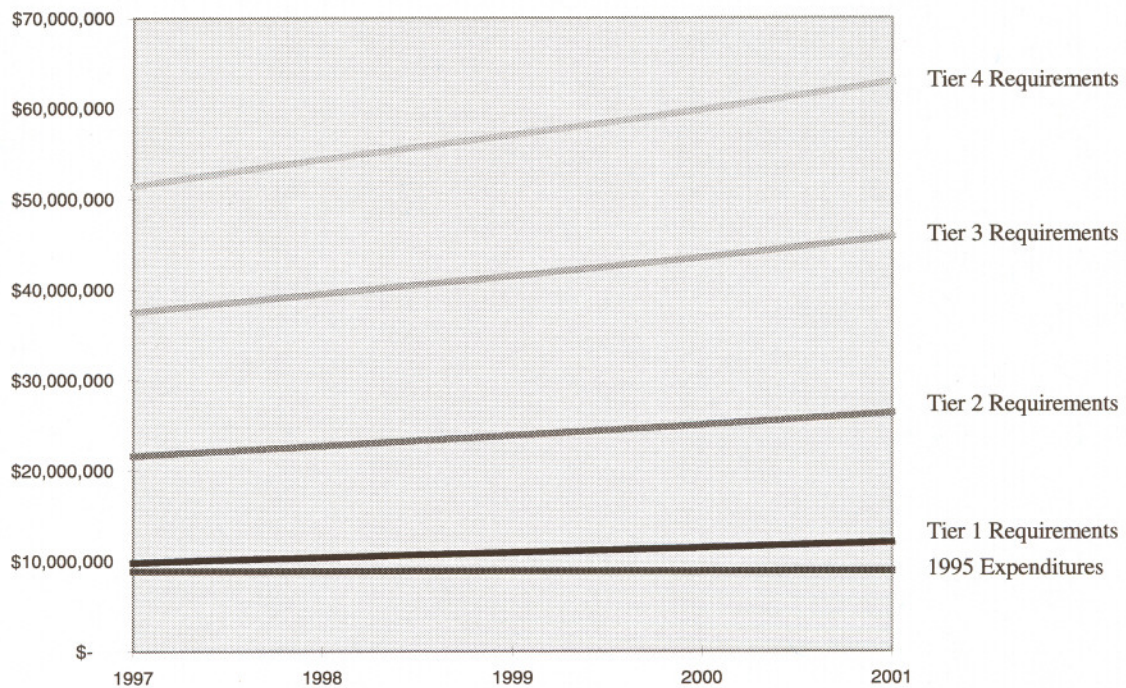
Tier 4: Optimal					
Mode	1997	1998	1999	2000	2001
Fixed Route	\$22,515,132	\$38,732,129	\$18,783,600	\$21,996,937	\$19,925,001
Demand Response	\$43,928,267	\$31,299,357	\$31,141,568	\$32,626,825	\$34,259,557
Rideshare	\$7,205,322	\$2,183,681	\$2,105,234	\$2,153,280	\$2,077,819
Intercity	\$22,148,837	\$5,942,567	\$5,504,719	\$5,764,495	\$6,048,478
Volunteer	\$1,106,798	\$1,171,358	\$1,228,760	\$1,288,882	\$1,355,285
Coordination	\$420,000	\$436,800	\$454,272	\$472,443	\$491,341
Total Cost	\$97,324,356	\$79,765,892	\$59,218,153	\$64,302,862	\$64,157,481
Capital Cost	\$45,410,976	\$24,965,232	\$1,718,523	\$3,976,023	\$703,517
Operating Cost	\$51,493,380	\$54,363,852	\$57,045,356	\$59,854,399	\$62,962,623
Benefit	\$ 394,890,226	\$ 418,783,353	\$ 440,016,908	\$ 462,277,600	\$ 487,079,743
Benefit/Cost	7.67	7.70	7.71	7.72	7.74

Several conclusions can be drawn from the funding requirements contained in the above table. First, the funding requirements increase substantially from Tier 1 to Tier 4 as the access requirements increase capital and operating costs. Second, operating requirements increased steadily from 1997 to 2001 as demographic and inflationary factors increased. Third, total funding requirements fluctuated from year to year due to varying capital requirements. Fourth, modal costs reflect transportation needs. Fifth, the benefits are found to "outnumber" the costs by a margin of four to over seven times. This means that, for every dollar spent on operating costs for public transportation, benefits will be at least four times as great as the cost.

In order to estimate statewide funding deficiencies in meeting public transportation needs for Idahoans, funding requirements for the period 1997 through 2001 were compared to projected funding levels for the same period. Specifically, the operating costs of each access tier for the years 1997 to 2001 were then compared to 1995 operating costs. Operating costs for 1995 were used as the 1997 through 2001 funding levels, because Idaho public transportation providers indicated that, in general, funding levels are not expected to appreciably increase beyond 1995 levels. Capital costs were analyzed separately because they fluctuate dramatically from year to year and do not lend themselves to comparisons on an annual basis.

The results provided in Exhibit ES-5 illustrate the widening gap between 1995 expenditures (i.e., projected operating funding level) and Tier 1 through Tier 4 operating requirements. Statewide funding deficiencies at Tiers 1, 2, 3, and 4 range from \$1.0 million, \$12.8 million, \$28.6 million, and \$42.6 million, respectively, in 1997, to \$3.2 million, \$17.5 million, \$36.9 million, and \$54.1 million, respectively, in 2001.

Exhibit ES-5—1997-2001 Statewide Operating Requirements and Funding Levels



A comparison of capital requirements for the years 1997 to 2001 with capital expenditures by the 11 largest public transportation providers during the period 1991 to 1995 demonstrates the magnitude of capital funding deficiencies. Capital expenditures by the 11 largest public transportation providers totaled approximately \$9.0 million for the period 1991 to 1995. This compares to statewide capital requirements, expressed in inflated year dollars, for the years 1997 to 2001 totaling approximately \$10.9 million for Tier 1, \$35.6 million for Tier 2, \$54.6 million for Tier 3, and \$76.8 million for Tier 4.

Findings and Implementation Recommendations

Public transportation in Idaho has improved significantly over the past few years. Service levels have increased, public transportation planning and administration have been strengthened, and an infrastructure to address coordination has been established.

During this study, a number of findings were identified. Findings represent opportunities for continued improvement of public transportation at the state and local levels. Findings and recommendations have been prepared to address opportunities related to policies, planning and programming, governance, coordination, services, funding, and benefits, and recommended steps to take over the next five years.

Findings and Recommendations: Policy

Finding: Current state public transportation policies should be reiterated to guide future public transportation planning and funding decisions.

Recommendations: During the next phase, the following steps should be taken to prepare state public transportation policies:

- Review current state public transportation goals in light of the results of the Idaho Public Transportation Needs and Benefits Study.
- Consider developing additional state public transportation goals addressing policy areas such as governance, public involvement, services, the environment, transportation infrastructure, transportation planning and development, and multi-modal transportation coordination.
- Consider developing objectives for each public transportation goal. Objectives should be expressed, to the greatest extent possible, in quantitative terms to support program and performance monitoring and evaluation.
- Review public transportation policy statements needed to guide planning efforts and funding decisions, including definitions of 1) public transportation and 2) the need for public transportation services.

Findings and Recommendations: Planning and Programming

Findings:

- The current consensus-based approach for identifying and prioritizing public transportation needs in Idaho necessitates further delineation of the roles and responsibilities of various stakeholders involved in the process.
- Over the past few years, there has been increasing attention directed towards the need for a basis for monitoring and evaluating public transportation performance in Idaho.

Recommendations: In the next phase, the following activities should be incorporated to efficiently and effectively carry out the Idaho State Legislature's directives regarding statewide public transportation planning and programming:

- Review and define the relationships between various state and local public transportation stakeholders in order to facilitate efficient and effective future planning and prioritization efforts.

- Review and define the roles and responsibilities of each stakeholder involved in the planning, prioritization, and funding process.
- Consider developing criteria for prioritizing needs.
- Consider developing indicators for program delivery and service and facility performance monitoring and evaluation, and determining data requirements to support program and performance monitoring and evaluation.
- Consider developing a process for reporting performance results on an annual basis.



Findings and Recommendations: Governance

Findings:

- Regional Public Transportation Authorities (RPTAs) are being established in Idaho to serve primarily urbanized and urban areas, as opposed to rural areas.
- RPTA-authorizing legislation makes accommodations for providing service to areas outside of RPTA boundaries; however, there is a lack of incentive for RPTAs to proactively address public transportation needs existing outside RPTA service boundaries.
- The approach to the provision of service adopted by an RPTA could potentially positively or negatively affect services provided in areas outside of RPTA boundaries.

Recommendations: In the next few months, the Division of Public Transportation needs to work with public transportation stakeholders to determine how public transportation needs can best be met under an RPTA scenario. Related activities are:

- Identify ways to ensure that potential RPTA services are implemented in a manner that does not adversely affect the rural areas.
- Identify ways to leverage the presence of an RPTA to enhance public transportation services in rural areas of regions served by an RPTA.
- Identify ways to provide incentives for RPTAs to proactively address the public transportation needs of areas outside of RPTA boundaries.

Findings and Recommendations: Coordination

Findings:

- The needs assessment results indicate that there is an opportunity to significantly increase coordination among public transportation providers in some areas of Idaho.
- There are even greater opportunities for achieving increased coordination between public, human service, and pupil transportation providers.



Recommendations: During the next two to three years, efforts should be made to continue to strengthen coordination of transportation in Idaho, including:

- Select coordination strategies based on the results of the Needs and Benefits Study and previous regional needs assessments. Coordination strategy options are cooperation, joint use arrangements, and consolidation.
- Seek ways to establish funding support for transportation coordination. Three recommended approaches to funding coordination are 1) funding staff support for state and local coordination entities, 2) increasing funding support for coordination projects, and 3) tying funding support for transportation to the provision of the most appropriate, least-cost trip.

Findings and Recommendations: Service

Findings: A variety of services are needed to meet public transportation needs in Idaho.

Recommendations: During the next five years, the Division of Public Transportation should work with regional public transportation stakeholders to address service needs by:

- Working interactively with regional stakeholders to prioritize public transportation needs in each region.
- Working closely with regional stakeholders to develop service strategies to address priority public transportation needs.
- Striving to ensure that regions continue to be served by a menu of services that enables public transportation needs to be met in the most efficient and effective way possible.

Findings and Recommendations: Funding

Findings:

- Funding projections indicate deficient results and insufficient funds to meet basic public transportation needs.
- Idaho public transportation providers are heavily reliant upon federal funding.
- More effective coordination of public transportation resources is an area of emphasis in Idaho. However, no funding support is provided for coordination activities.
- Many of the public transportation systems in Idaho are operating on a “shoe string.”
- Operating costs reported by public transportation providers in Idaho are, in many cases, 70 percent or less of average peer system operating costs, as expressed in costs per vehicle hour.

Recommendations: During the next two to three years, the Division of Public Transportation should develop a comprehensive public transportation funding strategy through the following actions:

- Develop a strategy for addressing funding deficiencies that includes dedicated federal, state, and local sources of revenue for public transportation.
- Continue efforts initiated in 1995 to establish a dedicated state funding source for public transportation.
- Continue efforts to establish dedicated local funding sources for public transportation, such as 1997 House Bill 348, which seeks to establish authorization for voters in Regional Public Transportation Authorities (RPTAs) to approve a public transportation (vehicle registration) fee.
- Consider other local funding sources for public transportation.
- Seek funding support for coordination activities.
- Continue to find ways to most efficiently utilize state agency funding for transportation services.



Seek a level of funding for public transportation that will support efficient and effective public transportation services and facilities.

Findings and Recommendations: Benefits

Findings: Innumerable qualitative and quantitative benefits are associated with investments in public transportation, some of which are tangible, some of which are not. Whether qualitative or quantitative, the benefits described in this report indicate that public transportation services contribute immensely to the quality of life for many individuals, particularly those that do not have, or are unable to drive, an automobile. In addition, the quantification of benefits clearly indicates that the benefits outweigh the costs, in some cases as much as seven times.

Recommendations: The benefits analysis indicates that there is tremendous value to not only identifying but also quantifying the contribution of public transportation. The Division of Public Transportation should continue to weave the benefits of proposed services into the story of public transportation in the State of Idaho so that decision-makers will fully understand the true value of their investment.

